

WHAT IS CLAIMED IS:

1. An information processing apparatus for generating print data to be printed by a printer, the information processing apparatus comprising:

a setting unit adapted to set a print property specifying a manner in which the print data is to be printed;

special-printing-mode specification unit adapted to specify a special printing mode; and

print property information generator adapted to generate print property information such that when the special printing mode is not selected, the print property information generator generates, in accordance with the setting made by the setting means, first print property information specifying a manner in which printing is performed on a first recording sheet, whereas when the special printing mode is selected, the print property information generator generates, in addition to the first print property information, second print property information specifying a manner in which printing is performed on a second recording sheet.

2. An information processing apparatus according to Claim 1, wherein when the print property information

generator generates the second print property information, the print property information generator automatically sets a predetermined print property to a predetermined property value.

3. An information processing apparatus according to Claim 2, wherein the predetermined print property is a property associated with a finishing process of a recording sheet.

4. An information processing apparatus according to Claim 3, wherein the property associated with the finishing process is set such that binding of a plurality of recording sheets is not performed by stapling the recording sheets.

5. An information processing apparatus according to Claim 3, wherein the property associated with the finishing process is set such that a folding process for folding a recording sheet is not performed.

6. An information processing apparatus according to Claim 3, wherein the property associated with the finishing process is set such that a punching process for punching a hole in a recording sheet is not performed.

8. An information processing apparatus according to Claim 7, wherein the property associated with layout is set such that a plurality of logical pages are not printed on one physical sheet.

10. An information processing apparatus according to Claim 1, wherein the first recording sheet is opaque and the second recording sheet is transparent.

12. An information processing apparatus according to

Claim 11, wherein the job generator generates a first print job on the basis of the first print property information and the print data and generates a second print job on the basis of the second print property information and the print data.

13. An information processing apparatus according to Claim 11, wherein the job generator generates a single print job including, in a combined form, the first print job and the second print job.

14. An information processing apparatus according to Claim 1, wherein the special printing mode is a presentation mode, the first print property information includes print property information describing a property associated with a printing process for creating a copy for a distribution, and the second print property information is print property information describing a property associated with a printing process for creating a copy for a presentation.

15. A method for processing data by an information processing apparatus to generate print data to be printed by a printer, the method comprising:

a setting step for setting a print property specifying a manner in which the print data is to be printed;

a special-printing-mode specifying step for specifying

a special printing mode; and

a print property information generating step for generating print property information such that when the special printing mode is not selected, first print property information specifying a manner in which printing is performed on a first recording sheet is generated in accordance with the setting made in the setting step, whereas when the special printing mode is selected, second print property information specifying a manner in which printing is performed on a second recording sheet is generated in addition to the first print property information.

16. A method for processing data according to Claim 15, further comprising a step for automatically setting a predetermined print property to a predetermined property value when the second print property information is generated.

17. A method for processing data according to Claim 16, wherein the predetermined property value is a property associated with a finishing process of a recording sheet.

18. A method for processing data according to Claim 17, wherein the property associated with the finishing process

is set such that binding of a plurality of recording sheets is not performed by stapling the recording sheets.

19. A method for processing data according to Claim 17, wherein the property associated with the finishing process is set such that a folding process for folding a recording sheet is not performed.

20. A method for processing data according to Claim 17, wherein the property associated with the finishing process is set such that a punching process for punching a hole in a recording sheet is not performed.

21. A method for processing data according to Claim 17, wherein the predetermined print property is a property associated with a layout in which data is printed on a recording sheet.

22. A method for processing data according to Claim 21, wherein the property associated with layout is set such that a plurality of logical pages are not printed on one physical sheet.

23. A method for processing data according to Claim 15, wherein the first recording sheet and the second recording

sheet are of the same sheet type.

24. A method for processing data according to Claim 15, wherein the first recording sheet is opaque and the second recording sheet is transparent.

25. A method for processing data according to Claim 15, further comprising a job generating step for generating a print job interpretable by a printer, from the print data and the print property information generated in the print property information generating step.

26. A method for processing data according to Claim 25, wherein the job generating step generates a first print job on the basis of the first print property information and the print data and generates a second print job on the basis of the second print property information and the print data.

27. A method for processing data according to Claim 25, wherein the job generating step generates a single print job including the first print job and the second print job.

28. A method for processing data according to Claim 15, wherein the special printing mode is a presentation mode, the first print property information is print property

information describing a property associated with a printing process for creating a copy for a distribution, and the second print property information is print property information describing a property associated with a printing process for creating a copy for a presentation.

29. A data processing program executable by an information processing apparatus to generate print data to be printed by a printer, the data processing program comprising:

a setting step for setting a print property specifying a manner in which the print data is to be printed;

a special-printing-mode specifying step for specifying a special printing mode; and

a print property information generating step for generating print property information such that when the special printing mode is not selected, first print property information specifying a manner in which printing is performed on a first recording sheet is generated in accordance with the setting made in the setting step, whereas when the special printing mode is selected, in addition to the first print property information, second print property information specifying a manner in which printing is performed on a second recording sheet is generated such that a predetermined item of the print

property is set to a predetermined property value.

30. A data processing program according to Claim 29, further comprising a step for automatically setting a predetermined print property to a predetermined property value when the second print property information is generated.

31. A data processing program according to Claim 30, wherein the predetermined property value is a property associated with a finishing process of a recording sheet.

32. A data processing program according to Claim 31, wherein the property associated with the finishing process is set such that binding of a plurality of recording sheets is not performed by stapling the recording sheets.

33. A data processing program according to Claim 31, wherein the property associated with the finishing process is set such that a folding process for folding a recording sheet is not performed.

34. A data processing program according to Claim 31, wherein the property associated with the finishing process is set such that a punching process for punching a hole in a

recording sheet is not performed.

35. A data processing program according to Claim 30, wherein the predetermined print property is a property associated with a layout in which data is printed on a recording sheet.

36. A data processing program according to Claim 35, wherein the property associated with layout is set such that a plurality of logical pages are not printed on one physical sheet.

37. A data processing program according to Claim 29, wherein the first recording sheet and the second recording sheet are of the same sheet type.

38. A data processing program according to Claim 29, wherein the first recording sheet is opaque and the second recording sheet is transparent.

39. A data processing program according to Claim 29, further comprising: a job generating step for generating a print job interpretable by a printer, from the print data and the print property information generated in the print property information generating step.

40. A data processing program according to Claim 39, wherein the job generating step generates a first print job on the basis of the first print property information and the print data and generates a second print job on the basis of the second print property information and the print data.

41. A data processing program according to Claim 39, wherein the job generating step generates a single print job including the first print job and the second print job.

42. A storage medium including a data processing program stored thereon for generating print data to be printed by a printer, the data processing program comprising:

a setting step for setting a print property specifying a manner in which the print data is to be printed;

a special-printing-mode specifying step for specifying a special printing mode; and

a print property information generating step for generating print property information such that when the special printing mode is not selected, first print property information specifying a manner in which printing is performed on a first recording sheet is generated in accordance with the setting made in the setting step,

Figure 1 consists of 12 histograms arranged in a single row. Each histogram represents the distribution of the number of non-zero elements in the vector x for a specific value of n . The x-axis for all histograms is labeled 'Number of non-zero elements' and ranges from 0 to 120. The y-axis is labeled 'Frequency' and ranges from 0 to 100. The histograms are labeled with n values: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, and 120. As n increases, the distribution of non-zero elements shifts to the right, indicating a higher number of non-zero elements in the vector x .